ISSUE 3

VIP-9890-CB
Vandal Resistant IP DoorPhone/Intercom

INTRODUCTION

The VIP-9890-CB IP Talkback Doorphone / Intercom allows communication to Valcom FXS units (VIP-811, -812, -814) and SIP-enabled telephone systems via an IP network. The VIP-9890-CB combines a rugged; weather-resistant talkback paging horn with a vandal-resistant enclosure, which is ideally suited for high-noise, exposed environments.

SPECIFICATIONS

Access Methods

- PBX, FXO Port w/VIP-811
- POTS telephone set w/VIP-811
- Valcom M Cast Page Group
- SIP – enabled telephone system

Features

- RJ-45 for network connection
- 1 Form C contact
- LED Status Indicator
- Network activity LEDs
- Power over Ethernet (PoE) 802.3af compatible
- Door Opening Contact Provided

Dimensions/Weight

Intercom Unit:

- 10.0” H x 12.5" W x 4" D (25.4cm H x 31.75cm W x 10.2cm D)
- Weight: 10.75lbs. (4.1 kg)

Network Interface:

- 2.0” H x 4.63" W x 9.13" D (5.1cm H x 11.8cm W x 23.2cm D)
- Weight: 0.80lbs. (0.36 kg)

Nominal Specifications

Input Impedance:	600 Ohms
Input Level:	-10dBm
Output Impedance:	600 Ohms
Output Level:	-10dBm nominal
Relay Current:	1AMP @ 24VDC

Nominal Power Requirements

Via 802.3af (PoE) Ethernet Switch	Class 3

Environment

VIP-9890-CB Network Interface

Temperature:	0 to +40° C
Humidity:	0 to 85% non-precipitating

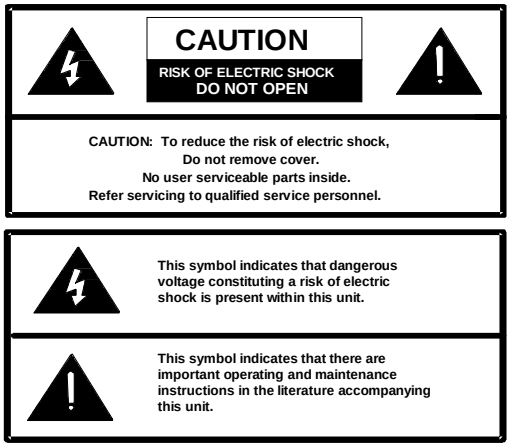
VIP-9890-CB Intercom Unit:

Suitable for indoor or outdoor installation

Packing List

Qty	Item
1	VIP-9890-CB Network Interface
1	VIP-9890-CB Intercom Unit
1	VSP Document
4	Tamper Hardware (Intercom unit only)
1	VIP172-RLY Relay Block
4	Wood Screws

Precautionary Designations



FCC Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at his own expense.

INSTALLATION

Operation:

The VIP-9890-CB provides intercom access via network connection to customer telephone system or stand alone telephone set. Interface to customer telephone system can be via SIP registration to a Voice over IP (VoIP) telephone system, or FXO port (when used with a VIP-811). Pressing the call button on the intercom unit initiates a call to a user-specified telephone number, and the call assurance LED behind the intercom unit face plate begins to flash. When the call is answered, a hands-free communications path is established to the intercom unit, and the call assurance LED behind the face plate remains lit. The form C relay included with the VIP-9890-CB may be activated by pressing the # key on the answering telephone, with the relay typically being used to activate door entry equipment.

Mounting

For enhanced protection against static electrical discharge, it is recommended the intercom unit shipped with the VIP-9890-CB be installed onto a grounded electrical box, If surface mounted, ground box to local ground.

The VIP-9890-CB Intercom unit is designed for double gang FD electrical box mounting and must be within 300 meters of the VIP-9890-CB Network Interface. See NEMA OS 3-2002 sec.1.2.3.5 for FD box specifications.

The VIP-9890-CB Network Interface is designed for wall mounting and must be within 100 meters of the network switch. Using the wood screws provided, secure the VIP-9890-CB Network Interface to the wall. Remove the Intercom unit from the packing container. Using a Phillips screwdriver, remove the two screws securing the front grille to the enclosure. Pre-drilled 13/64" mounting holes in the back of the enclosure are designed to fit a single gang, double gang or octagon outlet box. If not attaching to an outlet box, use the enclosure as a template. Hold the enclosure in the desired position on the wall and mark the location of mounting holes. Depending on wall construction type, prepare the mounting hole locations on the wall to securely attach the enclosure.

Wiring may be inserted through the large hole in the back of the enclosure, or through the knockout hole in the top of the enclosure. Insert wiring for signal connections and relay connections (if used) through desired hole. Use mounting hardware (not included) appropriate for the wall type to securely mount the enclosure to the wall.

After making signal connections, align the grille/speaker assembly with the enclosure. Install the four supplied tamper-resistant screws through the grille into the enclosure. Use a 1/8" security hex bit (not included) to tighten the screws securely.

Power Connections

The only method of powering a VIP-9890-CB Network Interface is via a Power over Ethernet (PoE) switch or power injector meeting the 802.3af specification.

Make all required signal connections before connecting to Ethernet switch or power injector meeting the 802.3af specification.

Network Connection

The VIP-9890-CB Network Interface has one RJ-45 NETWORK connector and one RJ-45 DOOR connector.

Use a standard Ethernet patch cable to connect the NETWORK connector of the VIP-9890-CB Network Interface to an Ethernet switch.

Signal Connections

Use standard Category 5 UTP cable to connect the VIP-9890-CB Network Interface to the Intercom unit. Connect the RJ-45 jack (labeled Door) on the Network Interface to the RJ-45 jack on the back of the Intercom unit speaker assembly using a standard Ethernet patch cable.

Door Relay Connections

Access to the form C relay is provided via a three pin screw terminal block on the VIP-9890-CB Intercom unit. The common contact is the middle terminal. The Normally Open contact is on the side closest to the RJ-45 connector, the Normally Closed contact is on the side furthest from the RJ-45 connector. Please refer to Figure 1.

For higher security, the included VIP172L-RLY connection block can be used. Please refer the Quick Start Installation guide packaged with the VIP172-RLY for installation details.

Aux Input

Aux input on the VIP-9890-CB Network Interface accepts line level audio such as background music and broadcasts it through the Intercom unit speaker. When the call button is pressed, the aux input is muted and remains muted until the call is terminated.

Status Indicator Lights

The VIP-9890-CB Intercom unit is equipped with a status indicator LED. LED flashes when the call button is pressed and steady when the call is connected.

The VIP-9890-CB Network Interface has 3 status indication lights on the side panel:

STATUS: Flashes during normal operation, and solid during system startup..

LINK: Indicates 100 Mbit Ethernet connection when illuminated. No activity indicates 10 Mbit connection.

ACT: Indicator flashes to indicate network activity.

Setup

Information specific to your application will need to be programmed into the VIP-9890-CB using a computer. The PC used for programming should be connected to the same subnet as the VIP-9890-CB.

Setup will be done using the IP Solutions Setup Tool. Download the latest version of the free IP Solutions Setup Tool from the Valcom web site at www.valcom.com/vipsetuptool.

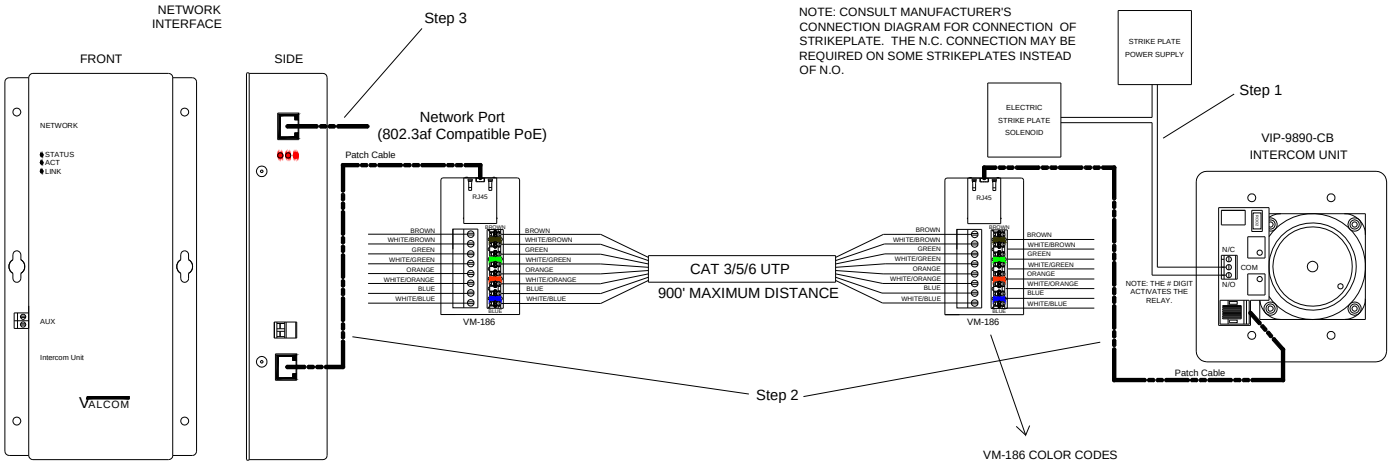
TECHNICAL ASSISTANCE

Assistance in troubleshooting is available from the factory. Call (540) 563-2000 and press 1 for Technical Support or via email at support@valcom.com.

When requesting assistance, you should include all available information. Information and trouble-shooting procedures are available on the Valcom website at www.valcom.com.

Valcom equipment is not field repairable. Valcom, Inc. maintains service facilities in Roanoke, VA. Should repairs be necessary, attach a tag to the unit clearly stating your company name, address, phone number, contact person and the nature of the problem. Send the unit to:

Valcom, Inc.
Repair & Return Dept.
5614 Hollins Road
Roanoke, Va. 24019-5056



VM-186 COLOR CODES

COLOR CODES	FUNCTION
BROWN & WHITE / BROWN	AUDIO
GREEN & WHITE / GREEN	RELAY CONTROL
ORANGE & WHITE / ORANGE	LED
BLUE & WHITE / BLUE	CALL SWITCH

1. (Optional) If a door strike/release is to be utilized, connect wiring to operate door strike. Connect to Normally Open or Normally Closed (as required) and Common. Relay contacts are rated for a maximum of 1Amp at 24VDC.

2. Connect the Intercom unit to the Network Interface. If the Intercom unit is close to the Network Interface, a standard Patch Cable may be used to connect between them. For longer distances, the VM-186 RJ45 Junction Boxes can be used to extend up to 900' between the Intercom unit and Network Interface.

3. Connect RJ45 connector from network. Power over Ethernet (PoE) is required; if PoE is not available from the switch, an inline power injector will be required.

4. Program the VIP-9890-CB using the VIP-102B IP Solutions Setup Tool.

FIGURE 1. VIP-9890-CB QUICK START INSTALLATION

VALCOM LIMITED WARRANTY

Valcom, Inc. warrants its products only to the original purchaser, for its own use, to be free from defects in materials and workmanship under conditions of normal use and service for a period of one year from the date of shipment. This Limited Warranty obligation shall be limited to the replacement, repair or refund of any such defective device within the warranty period, provided that:

1. inspection by Valcom, Inc. indicates the validity of the claim;
2. the defect is not the result of damage, misuse or negligence after the original shipment;
3. the product has not been altered in any way or repaired by others and that factory sealed units are unopened (a service charge plus parts and labor will be applied to units defaced or physically damaged);
4. freight charges for the return of products to Valcom are prepaid;
5. all units 'out of warranty' are subject to a service charge. The service charge will cover minor repairs (major repairs will be subject to additional charges for parts and labor).

This Limited Warranty is in lieu of and excludes all other warranties, expressed or implied and in no event shall Valcom, Inc. be liable for any anticipated profits, consequential damages, loss of time or other losses incurred by the buyer in connection with the purchase, operation, maintenance, installation, removal or use of the product. The maximum liability of Valcom under this warranty is limited to the purchase price of the specific Product covered by the warranty.

Disclaimer. Except for the Limited Warranty provided herein, the product is provided "as-is" without any warranty of any kind whatsoever including, without limitation, any **WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.**

This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with the F.O.B. point.

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